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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/756,352	01/08/2001	Lars Hakan Ramfelt	137.621CIP	6679

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EXAMINER	
NGUYEN, STEVEN H D	
ART UNIT	**PAPER NUMBER**
2665	

DATE MAILED: 07/14/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/756,352	RAMFELT ET AL.	
	Examiner	Art Unit	
	Steven HD Nguyen	2665	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *08 January 2001*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-9* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-9* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 3.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Drawings

1. The drawings are objected to because

Page 2, the label "Fig 4" of the top figure must be deleted.

Fig 3, the Ref "O" must be changed to – D --.

Specification

2. The disclosure is objected to because of the following informalities:

Page 1, lines 7, -- , now US patent 6,320,863 -- should be inserted after "1999".

Page 1, lines 8, -- , now US Patent 6,108,338 -- should be inserted after "1998".

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 6-9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 6, lines 5-6, the recitation "first segment" is vague and indefinite because the claim does not recite a second segment. Please clarify , so the meter and boundary of the claim cam be determined.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 1-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ramfelt (WO 97/24844) in view of Bostrom (WO 00/60815).

Regarding claims 1-5, Ramfelt discloses a dynamic transfer mode ring topology comprising a first node, a second node, a third node and a fourth node (Fig 1, Ref Node), a first segment of the dynamic transfer mode ring topology extending from the fourth node to the first node, a second segment of the dynamic transfer mode ring topology extending from the second node to the third node so that the second segment is being disjointed from the first segment, the dynamic transfer mode ring topology carrying a plurality of (n)-bits of DTM slots and simultaneously transmitting information in a first data slot over the first and second disjointed segments of the dynamic transfer mode ring

topology (Fig 1, See Abstract and Page 5, lines 29 and Page 7, lines 11). However, Ramfelt fails to disclose each DTM slot having (n-1) data bits and (1) control bit, an optical network in communication with the dynamic transfer mode ring topology, the optical network having an (m)-bit frame format, (n-1) and (m) being integers so that (n-1) is an integral multiple of (m) and (n) is a non-integral multiple of (m); (b) grouping the data bits into (m)-bit data groups having 8 bit data byte; (c) grouping the control bits into (m)-bit control groups having 8 bit control byte, the data bytes being separate from the control bytes; (d) forming a DTM set of the data groups and the control groups with providing the DTM set with a bit configuration that is an integral multiple of an (m)-bit frame format of the optical network; (e) mapping the DTM set onto an optical network frame on the optical network with a payload capacity that is an integral multiple of a total size of the DTM set; associating a first control bit of the control bytes with a first DTM data bit of the 8-bit data bytes. In the same field of endeavor, Bostrom discloses each DTM slot having (n-1) data bits and (1) control bit, an optical network in communication with the dynamic transfer mode ring topology, the optical network having an (m)-bit frame format, (n-1) and (m) being integers so that (n-1) is an integral multiple of (m) and (n) is a non-integral multiple of (m); (b) grouping the data bits into (m)-bit data groups having 8 bit data byte; (c) grouping the control bits into (m)-bit control groups having 8 bit control byte, the data bytes being separate from the control bytes; (d) forming a DTM set of the data groups and the control groups with providing the DTM set with a bit configuration that is an integral multiple of an (m)-bit frame format of the optical network; (e) mapping the DTM set onto an optical network frame on the optical network with a payload capacity that is an integral multiple of a total size of the DTM set;

associating a first control bit of the control bytes with a first DTM data bit of the 8-bit data bytes (See Page 4, lines 18 to page 7, lines 5, discloses received stream of information, separating data and control "flag" bits into a different group, See Page 7, lines 1-4 and mapping these groups into SONET, See Page 6, lines 7-25; Page 9, lines 3-14, 29-30, Page 10, lines 14 to Page 11, line 25).

Since, Bostrom suggests a method and system for transferring data and control information between DTM and Sonet or SDH. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to apply a method and system for transferring the information stream, which includes data and control bits by separating the data and control bits into a separated group, between DTM and Sonet as disclosed by Bostrom's method and system into Ramfelt's method and system. The motivation would have been to use a minimum overhead when conveys a several of different types of control information between the different networks.

Regarding claims 6-9, Ramfelt discloses a DTM topology having a first node, a second node, a third node and a fourth node (Fig 1, Ref Nodes), a first segment in the first dynamic transfer mode ring topology extending from the first node to the second node (See Abstract and Page 5, lines 29 and Page 7, lines 11). However, Ramfelt fails to disclose the DTM topology carrying a plurality of 65-bit DTM slots each having 64 data bits and 1 control bit; (b) grouping the data bits into 8-bit data bytes; (c) grouping the control bits into 8-bit control bytes, the data bytes being separate from the control bytes; (d) forming a DTM set of the groupings of data bytes and the control bytes; (e) connecting the DTM topology to a synchronous optical network having a 8-bit frame format; (f) mapping the DTM set onto the 8-bit frame format of the synchronous optical

network; and (g) transmitting the DTM set in the optical network frame without drifting the DTM set in the 8-bit frame format of the synchronous optical network. In the same field of endeavor, the DTM topology carrying a plurality of 65-bit DTM slots each having 64 data bits and 1 control bit; (b) grouping the data bits into 8-bit data bytes; (c) grouping the control bits into 8-bit control bytes, the data bytes being separate from the control bytes; (d) forming a DTM set of the groupings of data bytes and the control bytes; (e) connecting the DTM topology to a synchronous optical network having a 8-bit frame format; (f) mapping the DTM set onto the 8-bit frame format of the synchronous optical network; and (g) transmitting the DTM set in the optical network frame without drifting the DTM set in the 8-bit frame format of the synchronous optical network; associating each control bit of the control bytes with a group of data bytes so that a first control bit is associated with a first group of 64 data bits and a second control bit is associated with a second group of 64 data bits; providing the DTM set with 128 bytes of data bits and 2 bytes of control bytes and grouping the 128 bytes of data bits together into DTM slots each having 64 bits of data bits; providing the optical network with a payload frame capacity that is an integral multiple of a total bit size of the DTM set (See Page 4, lines 18 to page 7, lines 5, discloses received stream of information, separating data and control "flag" bits into a different group, See Page 7, lines 1-4 and mapping these groups into SONET, See Page 6, lines 7-25; Page 9, lines 3-14, 29-30, Page 10, lines 14 to Page 11, line 25).

Since, Bostrom suggests a method and system for transferring data and control information between DTM and Sonet or SDH. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to apply a method

and system for transferring the information stream, which includes data and control bits by separating the data and control bits into a separated group, between DTM and Sonet as disclosed by Bostrom's method and system into Ramfelt's method and system. The motivation would have been to use a minimum overhead when conveys a several of different types of control information between the different networks.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

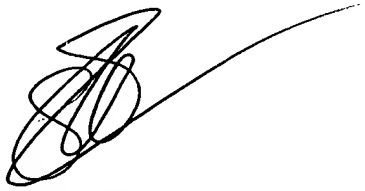
Russell (USP 6584118) discloses a method and system for mapping the Ethernet frame into SONET.

Goodman (USP 6636529) discloses a method and system for mapping the stream into SDH.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven HD Nguyen whose telephone number is (703) 308-8848. The examiner can normally be reached on 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy D Vu can be reached on (703) 308-6602. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Steven HD Nguyen
Primary Examiner
Art Unit 2665
7/11/04